

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of the Claims:

- 1-80. (Cancelled)
81. (Currently Amended) A macroscopic molecular array comprising at least about 10^6 single-wall carbon nanotubes, wherein (a) all of the single-wall carbon nanotubes in the macroscopic molecular array are in generally parallel orientation, and (b) all of the single-wall carbon nanotubes in ~~generally parallel orientation~~ the macroscopic molecular array have a substantially similar length, wherein the similar length is in the range of from about 5 to about 500 nanometers.
82. (Original) The array of claim 81 wherein said nanotubes are of the same type.
83. (Original) The array of claim 82 wherein said nanotubes are of the (n,n) type.
84. (Original) The array of claim 83 wherein said nanotubes are of the (10,10) type.
85. (Original) The array of claim 83 wherein said nanotubes are of the (m,n) type.
86. (Original) The array of claim 81 wherein said nanotubes are of different types.
87. (Original) The array of claim 81 further comprising a substrate attached to one end of said array and oriented substantially perpendicularly to the nanotubes in said array.
88. (Original) The array of claim 87 wherein said substrate is a bucky paper surface.
89. (Original) The array of claim 87 wherein said substrate is a metal layer selected from the group consisting of gold, mercury and indium-tin-oxide.
90. (Original) The array of claim 86 wherein a central portion of nanotubes are of the (n,n) type and an outer portion of nanotubes are of the (m,n) type.

91-103. (Canceled)

104. (Currently Amended) A solar cell for converting broad spectrum light energy into electrical current comprising a molecular array as the photon collector, wherein (a) the molecular array comprises at least about 10^6 single-wall carbon nanotubes, (b) all of the single-wall carbon nanotubes in the molecular array are in generally parallel orientation, and (c) all of the single-wall carbon nanotubes ~~generally parallel orientation in the molecular array~~ have a substantially similar length, wherein the similar length is in the range of from about 5 to about 500 nanometers.

105. (Original) The solar cell of claim 104 additionally comprising a photoactive dye coupled to the upper ends of the nanotubes in said array.

106-110. (Canceled)

111. (Currently Amended) A microporous anode for an electrochemical cell comprising a molecular array, wherein (a) the molecular array comprises at least about 10^6 single-wall carbon nanotubes, (b) all of the single-wall carbon nanotubes in the molecular array are in generally parallel orientation, and (c) all of the single-wall carbon nanotubes in ~~generally parallel orientation~~ the molecular array have a substantially similar length, wherein the similar length is in the range of from about 5 to about 500 nanometers.

112. (Currently Amended) A lithium ion secondary battery comprising an anode, a cathode comprising LiCoO_2 and an aprotic organic electrolyte wherein,

- (a) a fullerene intercalating compound of lithium forms at the anode under charging conditions,
- (b) the anode comprises a molecular array; and
- (c) the molecular array comprises at least about 10^6 single-wall carbon nanotubes;
- (d) all of the single-wall carbon nanotubes in the molecular array are in generally parallel orientation; and

(e) all of the single-wall carbon nanotubes in ~~generally parallel orientation~~ the molecular array have a substantially similar length, wherein the similar length is in the range of from about 5 to about 500 nanometers.

113-162. (Canceled)